"When I think of excellence, I think of people more than things because only people can bring quality, excellence, perfection to things that must work. It is in that light that we achieved the Apollo landings on the Moon."

—George M. Low

GEORGE M. LOW AWARD / 2004

Nomination Guidelines

National Aeronautics and Space Administration
Washington, DC

June 2004

NASA's Quality and Excellence Award

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George M. Low Award Trophy Inscription

This trophy is awarded in the memory of George M. Low, who greatly contributed to the early development of NASA space programs during his 27 years of Government service.

The medallion that is embedded in the shape of an Apollo Command Module has alloyed in it a portion of an artifact flown to the Moon and back on Apollo 11—the first manned lunar landing mission on July 16–24, 1969.

Established in 1985 as the NASA Excellence Award for Quality and Productivity, the George M. Low Award is the United States' senior award for organizational quality and excellence.

George M. Low was dedicated to quality and excellence. His career and achievements spanned many fields—space science, aeronautics, technology, and education. As an engineer, mathematician, scientist, NASA Director and Deputy Administrator, Chairman of the National Research Council, and President of Rensselaer Polytechnic Institute, his achievements were legendary. In the space program, he provided management and direction for the Mercury, Gemini, Apollo, and advanced piloted mission programs.

George M. Low advanced through NASA management on the strength of his extraordinary quality-embedded achievements. His progress to prominence made him a role model in the sight of all with whom he came in contact. He was a man with a vision—a vision shared by many who also dreamed that America should lead the way in astronautics and aeronautics. George M. Low stretched the boundaries of excellence; by his example, others are motivated to do the same.

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I. Purpose

The George M. Low (GML) Award is NASA's premier quality and performance award for NASA's prime contractors and subcontractors. The presentation of the GML Award signifies NASA's recognition that the award recipient has demonstrated excellence and outstanding technical and managerial achievements in quality and performance.

II. Nomination Responsibilities

Enterprises

- Annually, the Enterprises call for GML Award nominations from the NASA Centers.
- The Enterprises will assure that all nominations from the Centers fully comply with the eligibility requirements and nomination specifications outlined in this booklet.
- Enterprises may submit one nominee from an Enterprise contract or agreement.
- Nominations will be screened and evaluated by the Review Council. The Review Council will select up to eight finalists and forward the results of the selection to the Validation Board Site Visit Team, ATTN: Office of Safety and Mission Assurance. The Validation Board Site Visit Team will arrange the site visits.

Centers

- Centers will nominate candidates for the GML Award.

- Prior to submitting nominations to the Enterprises, Centers must forward, via e-mail, a list of the companies they wish to nominate to the other Centers along with a brief justification for the nomination. The other Centers should provide any appropriate information to the nominating Center concerning the merit of the nominations prior to the nominating Center recommending a nominee to their respective Enterprise.

- In the event that more than one Center plans to nominate a contractor that has contracts with multiple Centers, the Centers must select a lead Center that will submit the nomination with inputs from the other Centers. This fact must be noted in the lead page, as defined in Section III, Format Requirements.

- Centers are strongly encouraged to nominate a single candidate in each classification and category, up to a total of four nominations. Nominations will be submitted to the respective Center's managing Enterprise. Centers also are encouraged to have at least 50 percent of their nominations be either a small business or a subcontractor of a NASA prime contractor.

Headquarters Functional Offices

- Functional offices may nominate one small and one large business candidate. In addition to 20 hard copies, 1 copy of the nomination sent to the Office of Safety and Mission Assurance must be in electronic format.

- Functional offices' nominations will be submitted to the GML Award Program, ATTN: Office of Safety and Mission Assurance, for referral to the Review Council.

- Prior to submittal to the Office of Safety and Mission Assurance, Headquarters functional offices will assure that all nominations comply with the eligibility requirements and nomination specifications outlined in this booklet.

- The Office of Safety and Mission Assurance will forward a list of proposed functional office nominees to Center quality management associates for input, as appropriate, concerning the merit of the nomination.

III. Format Requirements

- The cover of the nomination (not to exceed one page) will include the following:
  - A brief description of the company;
  - The award category and classification in which the organization is being nominated;
  - Nomination Center (If more than one NASA Center is participating in the nomination, the lead as well as the participating Centers will be noted.);
  - Information demonstrating the company's qualifications for the identified category and classification;
  - The number of employees in the company and the number of employees dedicated to NASA contracts;
  - The full name, title, address, telephone number, facsimile number, and e-mail address of the highest ranking member of the organization for the company's GML Award point of contact or action officer; and
  - A complete list of the company's current contracts, their value, and the corresponding NASA Center for each contract. (Companies will be evaluated on the basis of all their NASA contracts.)

- Nominations will be a total of no more than seven pages in length, plus the cover page described above, and a glossary if one is needed. Nominations will be typed using a minimum font size of 10 points.

- The nomination must follow the sequence and address each of the seven criteria listed in Appendix B—Evaluation Factors. If a company does not believe that one of the criteria is germane to its business, a clear reason must be provided.

- Nominations that do not meet the eligibility and format requirements will not be considered.

IV. Categories and Classifications

GML Awards are presented to one outstanding company in each of the following categories and classifications:

Large Business
Product*
Service

Small Business
Product*
Service

* *A product can be hardware, software, research, and/or technology development.*

V. Eligibility Requirements

All NASA prime contractors and subcontractors, in good standing with NASA, are eligible to be nominated for the GML Award. Only one nomination for each business unit of a company will be eligible. The following requirements must be fulfilled:

Requirements for Large Businesses

- Aggregate NASA-related sales for the previous 3 years should exceed $1 million, with at least $250,000 in each of the preceding 3 years, or a minimum of at least 50 percent of total sales that are related to NASA.
- There should be a minimum of 50 employees, or 100,000 labor hours, engaged in NASA-related work for the preceding 3 years.
- A nominated element of a larger corporation should function as a self-sustaining profit center.
- Small divisions of large corporations which receive corporate support and resources qualify as a large business if they exceed $250,000 in annual NASA sales and have at least 25 employees engaged in NASA work for each of the preceding 3 years.

Requirements for Small Businesses (Federal requirements for a small, small disadvantaged, or women-owned small business apply.)

- Aggregate NASA-related sales for the 3 preceding years should exceed $250,000, or the organization should have a minimum of at least 50 percent of total sales that are NASA related.
- There should be a minimum of 25 full-time employees with at least one-third of the employees engaged in NASA-related work.

VI. Process Participants

Panel of Judges

The Panel of Judges is composed of the Enterprise Associate Administrators* and the Associate Administrator for Safety and Mission Assurance. The Associate Administrator for Safety and Mission Assurance is the chairperson.

* *Enterprise Associate Administrators may be included as members of the Review Council, Panel of Judges, or serve in an advisory capacity as needed.*

When functional office nominees are among the finalists, an Assistant Administrator from a Headquarters functional office will be appointed as an additional judge. The panel chairperson will report the Panel of Judges' selection of winners to the Administrator.

Review Council

The Review Council is composed of representatives from each Enterprise and the Centers and Headquarters functional offices submitting nominations.

The Review Council evaluates the candidates submitted for the GML Award by the Centers and the Headquarters functional offices to verify eligibility and assess the candidates according to the GML evaluation factors (Appendix B). In September 2004, the Review Council will select up to eight finalists, with no more than two in any one category, and forward the results of the selection to the Validation Board Site Visit Team for consideration. Finalists selected by the Review Council will receive a site visit.

On a case-by-case basis, without violating the spirit of the GML Award program and by consensus, the Review Council has latitude to deviate from a strict interpretation of the eligibility requirements, if appropriate.

Validation Board Site Visit Team

The Validation Board Site Visit Team is composed of five or more members, including a representative from each Enterprise and additional members from the Centers and/or the Headquarters functional offices. The Associate Administrator for Safety and Mission Assurance also may select additional members. The Validation Board Site Visit Team conducts onsite visits.

The purpose of the site visit is to allow Validation Board Site Visit Team members to meet the company's management, observe the company's operations, and give company management an opportunity to answer questions and to clarify specific issues that surfaced in the company's nomination.

The site visit will be no more than 1 day. Actual onsite time is 6 hours. The Validation Board Site Visit Team will consist of members of the Review Council and may be organized into large business and small business subteams. In addition, the Center or Headquarters functional office whose finalist is being visited is encouraged to send a representative to the site visit.

Consultants

Although they are not members of the Panel of Judges, the Validation Board Site Visit Team, or the Review Council, other NASA offices involved in the acquisition and contract oversight process may be consulted throughout the evaluation process for relevant input. These NASA offices will include, but are not limited to, the Office of the General Counsel, the Office of the Inspector General, the Office of Procurement, the Office of Equal Opportunity Programs, and the Office of Small and Disadvantaged Business Utilization.

VII. Selection, Evaluation, and Validation Factors

Selection and Evaluation

Throughout the nomination process, GML Award candidates will be considered according to the following seven nomination factors as they apply to the contractual requirements of the nominee:

1. Customer satisfaction and contract technical performance,
2. Schedule performance,
3. Cost performance,
4. Management initiatives responsive to NASA's strategic goals,
5. Leadership and continuous improvement,
6. Research and development and/or innovative technology breakthroughs, and
7. Items of special interest to NASA.

Appendix B contains more detailed information about the evaluation factors and suggested point values that may be used to assess a candidate.

Review of Nominees and Selection of Finalists

- The Review Council will select up to eight finalists.
- The Centers will be notified by the Enterprises of the Review Council's findings with respect to their nominees.
- The Office of Safety and Mission Assurance will notify Headquarters functional offices of the Review Council's findings.
- Finalists will be notified in writing by the GML Award program manager of their status and asked if they wish to continue in the process. If so, a site visit will be coordinated.

Validation of Finalists

- Finalist nominations will be evaluated by the Review Council, and up to eight finalists will be selected for site visits by the Validation Board Team.
- The Centers will be notified by the Enterprises of the results of the Review Council's findings with respect to their nominees.
- The Office of Safety and Mission Assurance will notify Headquarters functional offices of the Review Council's findings.
- The GML Award program manager will notify the organizations that have been selected as finalists and arrange for a site visit by members of the Validation Board Team.

Selection of Award Recipients

- Following the site visits, the Validation Board Site Visit Team recommends winners to the Panel of Judges.
- The Panel of Judges will select the winners and submit the results of the selection to the Administrator for approval.
- Award winners and finalists will be announced during the 19th Continual Improvement and Reinvention Conference in the spring of 2005.

VIII. Awards

- Winning organizations will receive the George M. Low Award Trophy. The Administrator will present the GML Award Trophies at the 19th NASA Continual Improvement and Reinvention Conference in the spring of 2005.

- The Administrator also will present the George M. Low Award Finalist Plaques at the 2005 conference. With the approval of the Panel of Judges, all nonwinning finalists will receive the GML Award Finalist Plaque.

- An award winner is ineligible to be placed in nomination again for a period of 3 years.

- Winning organizations will be asked to provide a copy of their nomination, minus proprietary information, to the GML Award program manager after the conference. This information will be used in a “highlights” or “lessons learned” brochure to help other organizations or subsequent nominees.

Appendix A—Milestone Schedule

June 2004

- 2004 GML Award nomination guidelines are distributed.
- Letter from the Office of Safety and Mission Assurance to the Enterprise and Headquarters functional offices opens the GML Award nomination cycle.
- Enterprise and Headquarters functional offices furnish the name of their GML Award action officer to the Office of Safety and Mission Assurance, Kelly Kabiri, on (202) 358-0590, by June 30, 2004.
- Centers assemble nominations and, as appropriate, submit the names of nominees to other Center quality management associates for comment. This activity is particularly important if a nominee has contracts with NASA Centers other than the nominating Center, in order to assure no duplication of effort.

July 2004

- Headquarters functional offices submit nominations to the GML Award Program, ATTN: Office of Safety and Mission Assurance, by July 30, 2004.
- Enterprises receive and review Center nominations, and furnish their nominees' names to the GML Award Program, ATTN: Office of Safety and Mission Assurance, by July 30, 2004.

September 2004

- The Review Council is convened. The Review Council reviews and scores all of the nominations, selects up to eight finalist candidates, and forwards the results of the selection to the GML Award Program, ATTN: Office of Safety and Mission Assurance.
- Review Council and Validation Board Site Visit Team are selected.

October 2004

- From the finalists' nominations, the Review Council will select up to eight finalists for a site visit.

November–December 2004

- Finalists are notified that they will receive a site visit. Acceptance of the visit is voluntary.
- Validation Board Site Visit Team conducts a 6-hour site visit to each finalist organization.

January–February 2005

- The Validation Board Site Visit Team prepares its findings for the Panel of Judges.
- The Panel of Judges selects up to four GML Award winners, with no more than one in each category/classification combination. The Panel of Judges also determines the companies that will receive a GML Award Finalist Plaque.
- The NASA Administrator approves the selections.

March–April 2005

- The Administrator presents the GML Awards at the 19th NASA Continual Improvement and Reinvention Conference in the spring of 2005.

Appendix B—Evaluation Factors

During the nomination/evaluation/screening process, the Centers and the Enterprises will use the following nomination factors. Suggested scores for each factor and subfactor have been provided as an additional tool to assist in ranking nominees.

1. Customer Satisfaction and Contract Technical Performance (250 Points)

1.1 Customer Satisfaction (100 Points)

A. Does the contractor have a process to gauge NASA's customer satisfaction (i.e., the quality, timeliness, and responsiveness of the contractor's products and services), and, if so, does the contractor continually evaluate and improve this process? How effective is this process? (50)
B. How effectively does the contractor respond and follow up with NASA to build relationships and provide support in times of changing programs, schedules, and costs? (25)
C. Does the contractor have an effective listening and learning strategy to understand and anticipate NASA's needs? (25)

1.2 Contract Technical Performance and Outcomes (150 Points)

A. Does the contractor have an effective process for generating performance requirements and communicating them throughout the organization? (25)
B. What is the objective evidence (award fees, other data, or records) that demonstrated NASA's high degree of satisfaction with the contractor's performance in all areas of activity over the past 3 years? (60)
C. Does the contractor have effective processes and management systems for requirement control, configuration management, project management, and corrective action? (25)
D. Has the contractor instituted initiatives to improve the value of its products and/or services, and, if so, how effective are they? (40)

2. Schedule Performance (150 Points)

A. What is the contractor's 3- to 5-year history of meeting schedule requirements on contracts? (The length of contracts should be considered. Outstanding results would reflect consistently positive trends.) (90)
B. How effective is the contractor's process for evaluating, documenting, and distributing schedule requirements? (25)
C. How responsive has the contractor been to rescheduling, work-arounds, and reprioritized work activities? (35)

3. Cost Performance (150 Points)

A. For the past 3 or more years, allowing for NASA-initiated changes, are actual costs at or below the estimated contract cost? (50)
B. Does the contractor advise NASA of pending cost changes or cost risks in a timely manner? (25)
C. What kind of cost-reduction/cost-avoidance record has the contractor demonstrated over the past 3 or more years? What specific initiatives were instituted to accomplish this? (75)

4. Management Initiatives Responsive to NASA's Strategic Goals (75 Points)

A. To what extent does the contractor's business plan align with NASA's strategic plan and quality objectives? (25)
B. To what extent is the business plan deployed throughout the contractor's organization? (25)
C. How effective is the contractor in instilling high-performance objectives into the company's daily business operations? (25)

5. Leadership and Continuous Improvement (150 Points)

A. How effectively do the contractor's senior managers involve themselves and their workforce in creating the organization's vision, mission, values, and quality policy? (25)
B. What are the management tools (i.e., capability maturity models or reengineering) being used to set, track, document, measure, evaluate, and continuously improve processes and performance? How effective are they? (50)
C. How well does the contractor demonstrate leadership with regard to managing the workforce, fostering teamwork, and developing a high-performing, learning organization? (25)
D. How well does the contractor benchmark the processes of best-in-class organizations to determine improvement goals and measure progress toward world-class status? (20)
E. How effective is the contractor in helping its subcontractors/suppliers infuse continual improvement into their processes, products, and services? (30)

6. Research and Development and/or Innovative Technology Breakthroughs (75 Points)

When research and development and/or technology breakthroughs are not part of a businesses' operations, focus should be on innovative management initiatives or activities that make a special contribution to the ability of NASA to accomplish its mission.

7. Items of Special Interest to NASA (150 Points)

This factor addresses areas where NASA places special emphasis, such as the following:

A. What special safety initiatives (e.g., Dupont-like safety program) does the contractor have in place that would underscore NASA's vital concern with safety of product, service, workforce, and workplace? Is the contractor's safety program management centered? (Does safety information, i.e., goals, performance, and incident information, flow through the normal management chain, as opposed to the safety chain?) (75)
B. Is the contractor an equal opportunity employer? (In this area, other than being an equal opportunity employer, NASA advocates a policy among its contractors to recruit, select, promote, transfer, train, and educate in all job groups without regard to race, culture, sex, age, religion, national origin, and physical and mental handicap, where otherwise qualified.) What are the characteristics of the contractor's workforce diversity? (25)
C. In what ways does the contractor assist NASA in meeting its goals by providing maximum practicable opportunities for small, small disadvantaged, and women-owned small businesses to participate in NASA programs? (25)
D. What is the contractor's scope of registration to ISO 9000? If not registered, what are the contractor's plans for becoming ISO 9000 registered? (20)
E. Has the contractor received any recognition for excellence (i.e., State and Senate awards, the Baldrige Award, national awards and achievements, or corporate or other industry awards)? (5)

Appendix C—Scoring Guidelines

Award team members individually score each criteria element. The following guidelines are used in determining scores in each criteria element.

PERCENTAGE	DESCRIPTION	HOW LONG IN PLACE	DEPLOYMENT	PERFORMANCE
91–100	Excellent	3+ years	91–100%	Sustained high performance with constant improvement
81–90	Very Good	3 years	81–90%	Starts moderately and improves to high performance
71–80	Good	2–3 years	61–80%	Gradual continual improvement
61–70	Average	2 years	41–60%	Starts low to moderate and improves slightly
51–60	Fair	1–2 years	21–40%	Starts low and improves to moderate
<50	Poor	<1 year	0–20%	Starts and stays low

Each of the three factors (How Long in Place, Deployment, and Performance) is considered in evaluating each criteria element (Appendix B).

George M. Low Award Past Recipients

2003

Marotta Controls, Inc.
(Small-Product)

Lockheed Martin Space Operations, ITS
(Large-Service)

Spectrolab, A Boeing Company
(Large-Product)

2002

Analytical Services & Materials, Inc.
(Small-Service)

Jacobs Sverdrup
Marshall Space Flight Center Group
(Large-Service)

ManTech International Corporation
Aerospace Technology Applications Center
(Large-Service)

RS Information Systems, Inc.
(Small-Service)

Williams International
(Small-Product)

2001

Native American Services, Inc.
(Small-Service)

Raytheon ITSS
(Large-Service)

Swales Aerospace
(Small-Product)

2000

Advanced Technologies Incorporated
(Small-Product)

The Boeing Company, Delta Launch Division
(Large-Product)

Computer Sciences Corporation, NASA Programs
(Large-Service)

Jackson & Tull, Inc., Aerospace Engineering Division
(Small-Service)

1999

Barrios Technology
(Small-Product)

Kay and Associates, Inc.
(Small-Service)

Raytheon Service Company
(Large-Service)

Thiokol Propulsion, Space Operations
(Large-Product)

1997–98

BST Systems, Inc.
(Small-Product)

Advanced Technology Company
(Small-Service)

ILC Dover, Inc.
(Large-Product)

AlliedSignal Technical Services Corporation
(Large-Service)

DYNCORP—Johnson Support Division
(Large-Service)

1996–97

Dynamic Engineering, Inc.
(Small-Product)

Hummer Associates
(Small-Service)

Boeing-Rocketdyne Propulsion & Power
(Large-Product)

Scientific & Commercial Systems Corporation
(Small-Service)

1995–96

Hamilton Standard Space Systems International
(Large-Product)

1994–95

Unisys Space Systems
(Large-Service)

1992

IBM Federal Systems Company
(Large-Service)

Honeywell Space and Strategic Systems Operation
(Large-Product)

1991

Grumman Technical Services Division
(Large-Service)

Thiokol Space Systems
(Large-Product)

1990

Rockwell Space Systems Division
(Large-Product)

Marotta Scientific Controls, Inc.
(Small-Product)

1989

Lockheed Engineering and Sciences Company
(Large-Service)

1988

Rocketdyne Division, Rockwell International Corporation
(Large-Product)

1987

IBM Federal Sector Division
(Large-Service)

Martin Marietta Michoud Aerospace
(Large-Product)